849 NW State Road 45
Newberry, Fl. 32669 USA
Phone: 352.472.5500
Fax: 352.472.2030
Email: info@timcoengr.com

FCC PART 15B / RSS-215

ANALOGUE SCANNING RECEIVER

COMBO TEST REPORT

Applicant	**UNIDEN AMERICA CORPORATION**
Address	**3001 GATEWAY DRIVE SUITE 130 IRVING TEXAS USA 75063**
FCC ID:	**AMWUT416**
IC	**513C-UT416**
Model Number	**BearTracker 885**
Product Description	CB RADIO WITH SCANNING RECEIVER
Date Sample Received	3/16/2017
Final Test Date	4/3/2017
Tested By	Tim Royer
Approved By	Sid Sanders
Test Results	☒ PASS ☐ FAIL

Report Number	Version Number	Description	Issue Date
422CUT17TestReport	Rev1	Initial Issue	4/3/2017
422CUT17TestReport	Rev2	Updated signature and added 38 dB Rejection results to page 5	4/19/2017

TABLE OF CONTENTS

GENERAL REMARKS

The attached report shall not be reproduced except in full without the written permission of Timco Engineering Inc.

Summary

The device under test does:

☒ Fulfill the general approval requirements as identified in this test report and was selected by the customer.

☐ Not fulfill the general approval requirements as identified in this test report

Attestations

This equipment has been tested in accordance with the standards identified in this test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report.

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025 requirements.

I attest that the necessary measurements were made at:

Timco Engineering Inc.
849 NW State Road 45
Newberry, FL 32669

Tested by:
Name and Title: Tim Royer, Project Manager/Testing Engineer

Date: 4/6/2017

Reviewed and approved by:
Name and Title: Sid Sanders, Engineer

Date: 4/11/17

EUT SPECIFICATION

This test results relates only to the items tested.	
EUT DESCRIPTION	CB RADIO WITH SCANNING RECEIVER
REQUIREMENTS	CFR 47 FCC Part 15B, RSS-215 Issue 2, RSS-Gen Issue 4
MODEL NUMBER	BearTracker 885
TEST STANDARDS	ANSI C63.4 – 2014, FCC Part 15A, RSS-Gen Issue 4
TEST FREQUENCIES	27.205, 162.425 & 512MHz
EUT POWER SOURCE	☐ 100–240Vac/50– 60Hz
	☒ DC Power 13.8V
	☐ Battery Operated
TEST ITEM	☐ Prototype
	☒ Pre-Production
	☐ Production
TYPE OF EQUIPMENT	☐ Fixed
	☒ Mobile
	☐ Portable
MODIFICATIONS TO EUT:	☒ No ☐ Yes (explanation below)
TEST MODE DESCRIPTION	Receive only, Tuned to three places in band and scanning.
TEST FACILITIES	**Timco Engineering Inc. located at 849 NW State Road 45 Newberry, FL 32669 USA.**
LABORATORY TEST CONDITION	Temperature: 24-26ºC Relative humidity: 50-65% Barometric Pressure:30.01”

PERIPHERALS USED FOR TESTING

Description	Model	Connector	Length
Microphone	Bearcat	6 pin	1m
GPS Antenna	---	RJ12	2m

TEST RESULTS SUMMARY

Test Item	FCC Rule Part	RSS Specification	Result
Radiated Spurious Emissions	15.109	215 sec 5.1, GEN sec 7.1	Pass
Powerline Conducted Emissions	15.107	215, sec 5.1, GEN sec 8.8	N/A
38 dB Rejection	15.121	N/A	NA(1)

Notes:
Manufacturer provided attestation letter, no test required.

RADIATED SPURIOUS EMISSIONS

Rule Part No.: FCC Part 15 Subpart B, RSS-215 sec 5.1

Requirements: FCC Part 15.109(a), RSS GEN 7.1.2 Radiated Emission Limit

Class B Field Strength Limits @ 3 Meters			
Frequency (MHz)	**Quasi-peak (dBuV/m)**	**Average (dBuV/m)**	**Peak (dBuV/m)**
30 – 88	40.0	-	-
80 – 216	43.5	-	-
216 – 960	46.0	-	-
960 - 1000	54.0	-	-
> 1000	54.0	54	74

FCC Part 15.109(f) Radiated Emission Limit
For a receiver which employs terminals for the connection of an external receiving antenna, the receiver shall be tested to demonstrate compliance with the provisions of this section with an antenna connected to the antenna terminals unless the antenna conducted power is measured as specified in §15.111(a).

Procedure: FCC Part 15.33(b)(3) Frequency range of radiated measurements

FCC Part 15.35(a) Measurement detector functions and bandwidths

ANSI C63.4 Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment 9 kHz to 40 GHz

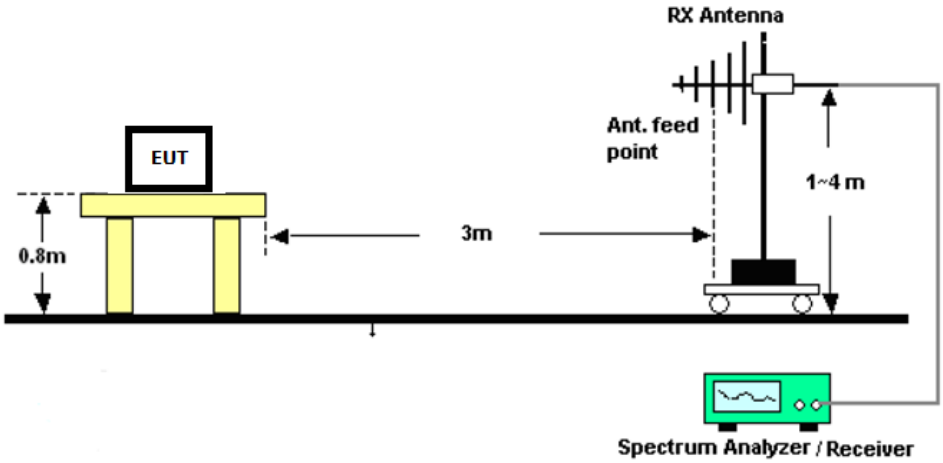
§ 6.2 Operating conditions
§ 6.3 Arrangement of EUT
§ 8.3.1 Exploratory radiated emissions measurements
§ 8.3.2 Final radiated emission measurements

Configuration: The scanner receiver spurious emissions are to be measured when the receiver is in the scanning mode and repeated when the scanning is stopped.

RADIATED SPURIOUS EMISSIONS

Setup:

Emissions 30 – 1000 MHz



RADIATED SPURIOUS EMISSIONS

Test Data: **Tuned to 27.205MHz, 30 – 200 MHz Vertical Peak Plot**

3 Meter Field Strength Plot

ROHDE&SCHWARZ

07.Apr 17 11:32

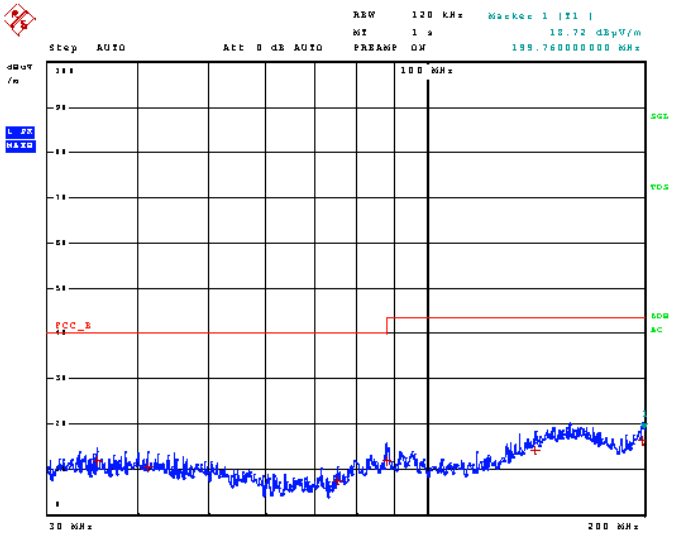
Test Spec CISPR 22 Radiated Disturbances

Polarity
Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Page 1 of 2

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Tuned to 27.205MHz, 30 – 200 MHz Vertical Peak Plot Cont.**

3 Meter Field Strength Plot

07.Apr 17 11:32

Test Spec CISPR 22 Radiated Disturbances

Polarity
Vertical

Final Measurement

Meas Time: 1 s
Margin: 30 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	35.000000000 MHz	11.79	Quasi Peak	-28.21
1	41.200000000 MHz	10.68	Quasi Peak	-29.32
1	75.280000000 MHz	7.49	Quasi Peak	-32.51
1	87.840000000 MHz	11.79	Quasi Peak	-28.21
1	141.520000000 MHz	14.20	Quasi Peak	-29.30
1	198.640000000 MHz	16.18	Quasi Peak	-27.32

Page 2 of 2

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Tuned to 27.205MHz, 30 – 200 MHz Horizontal Peak Plot**

3 Meter Field Strength Plot

ROHDE&SCHWARZ

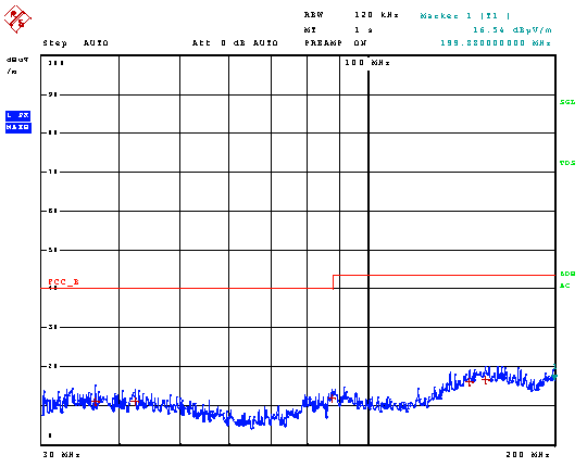
07.Apr 17 11:34

Test Spec CISPR 22 Radiated Disturbances
Polarity
Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Page 1 of 2

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Tuned to 162.425 MHz, 30 – 200 MHz Vertical Peak Plot**

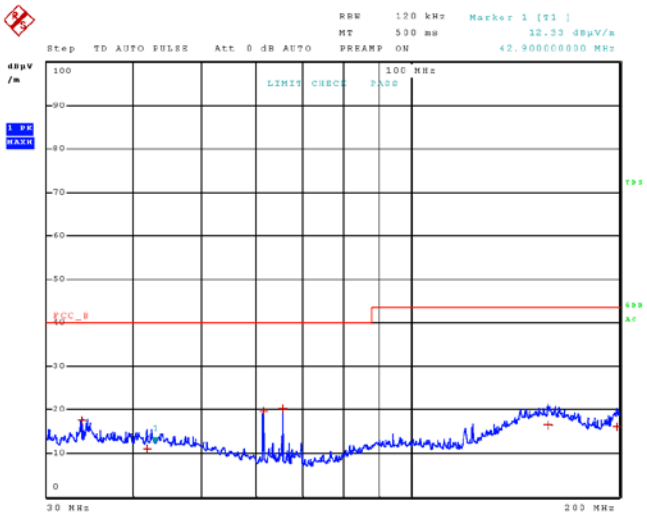
3 Meter Field Strength Plot

31.Mar 17 13:30

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	30.00 kHz	120.00 kHz	10 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 500 ms
Margin: 25 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	33.600000000 MHz	17.48	Quasi Peak	-22.52
1	41.820000000 MHz	11.12	Quasi Peak	-28.88
1	61.380000000 MHz	19.59	Quasi Peak	-20.41
1	65.460000000 MHz	20.35	Quasi Peak	-19.65
1	157.530000000 MHz	16.49	Quasi Peak	-27.01
1	198.360000000 MHz	16.03	Quasi Peak	-27.47

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: Tuned to 162.425 MHz, 30 – 200 MHz Horizontal Peak Plot

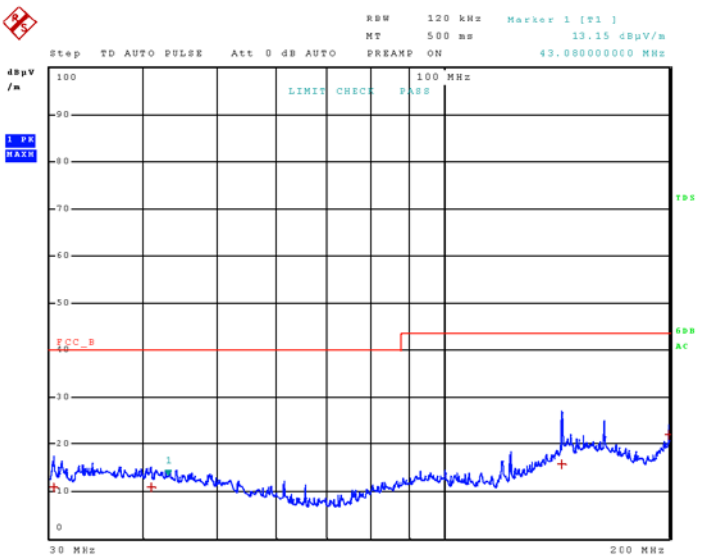
3 Meter Field Strength Plot

31.Mar 17 13:29

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	30.00 kHz	120.00 kHz	10 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 500 ms
Margin: 25 dB
Subranges: 4

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	30.330000000 MHz	10.91	Quasi Peak	-29.09
1	40.830000000 MHz	10.76	Quasi Peak	-29.24
1	143.760000000 MHz	15.74	Quasi Peak	-27.76
1	199.470000000 MHz	21.85	Quasi Peak	-21.65

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: Tuned to 162.425 MHz, 30 – 200 MHz Horizontal Peak Plot

3 Meter Field Strength Plot

07.Apr 17 11:34

Test Spec CISPR 22 Radiated Disturbances

Polarity
Vertical

Final Measurement

Meas Time: 1 s
Margin: 30 dB
Subranges: 5

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	36.520000000 MHz	11.11	Quasi Peak	-28.89
1	42.240000000 MHz	10.93	Quasi Peak	-29.07
1	87.680000000 MHz	11.85	Quasi Peak	-28.15
1	145.600000000 MHz	16.16	Quasi Peak	-27.34
1	154.800000000 MHz	16.45	Quasi Peak	-27.05

Page 2 of 2

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: Tuned to 512 MHz, 30 – 200 MHz Vertical Peak Plot Cont.

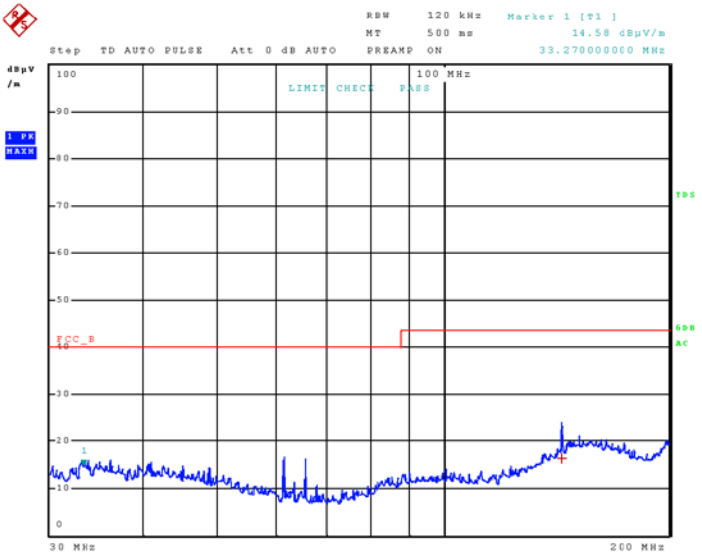
3 Meter Field Strength Plot

03.Apr 17 10:36

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	30.00 kHz	120.00 kHz	10 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 500 ms
Margin: 20 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	143.760000000 MHz	16.28	Quasi Peak	-27.22

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: Tuned to 512 MHz, 30 – 200 MHz Horizontal Peak Plot

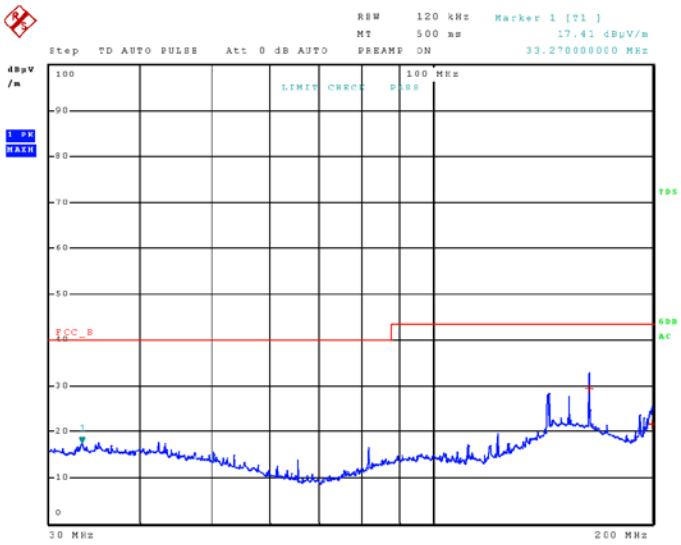
3 Meter Field Strength Plot

03.Apr 17 10:38

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	30.00 kHz	120.00 kHz	10 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 500 ms
Margin: 20 dB
Subranges: 2

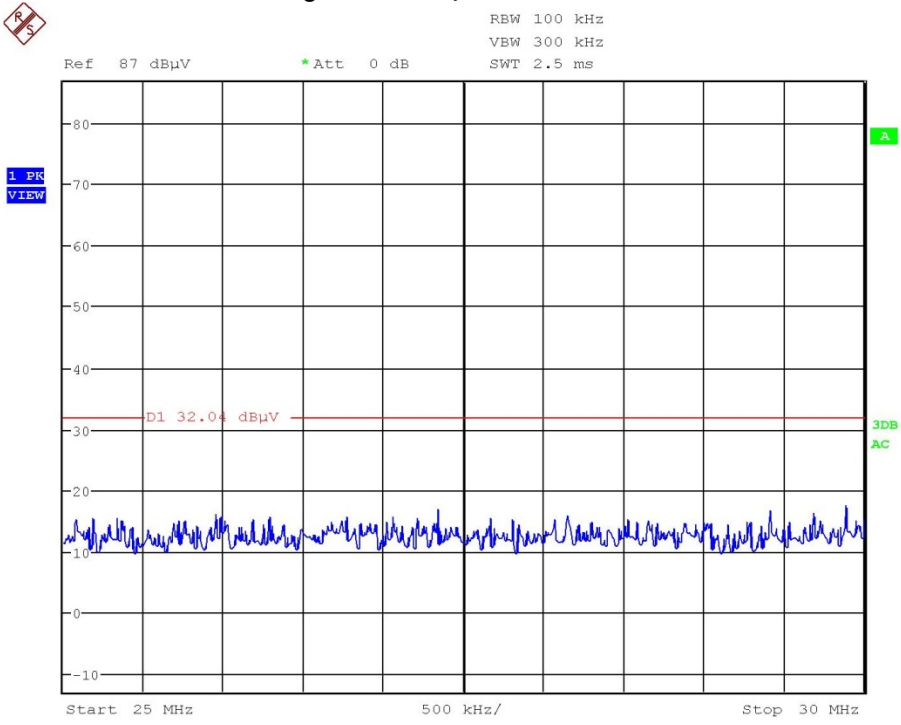
Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	163.650000000 MHz	29.23	Quasi Peak	-14.27
1	199.500000000 MHz	21.46	Quasi Peak	-22.04

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: Scanning CB bands, 25 – 30 MHz Vertical Peak Plot



Date: 7.APR.2017 11:27:48

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning CB bands, 30 – 200 MHz Vertical Peak Plot**

3 Meter Field Strength Plot

31.Mar 17 13:33

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	30.00 kHz	120.00 kHz	10 µs	Auto	20 dB	INPUT1

Final Measurement

Meas Time: 500 ms
Margin: 25 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	33.630000000 MHz	11.63	Quasi Peak	-28.37
1	39.300000000 MHz	12.76	Quasi Peak	-27.24
1	61.380000000 MHz	20.01	Quasi Peak	-19.99
1	65.460000000 MHz	18.98	Quasi Peak	-21.02
1	144.270000000 MHz	16.73	Quasi Peak	-26.77
1	199.500000000 MHz	16.59	Quasi Peak	-26.91

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning CB bands, 30 – 200 MHz Horizontal Peak Plot**

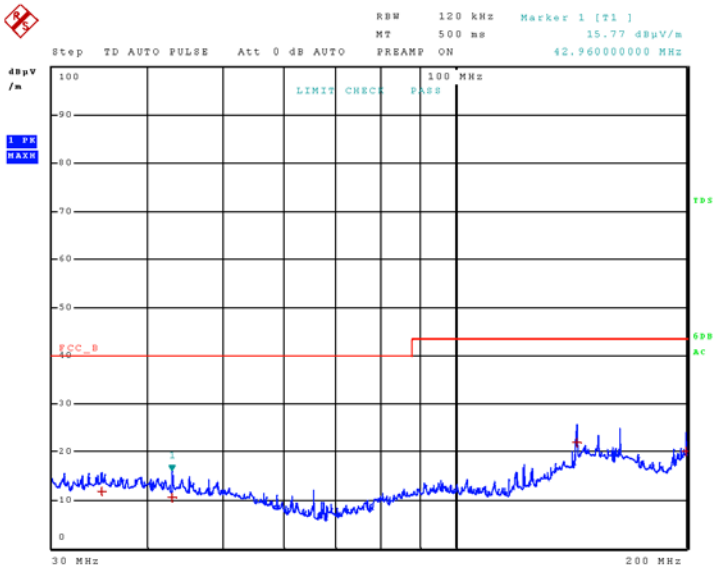
3 Meter Field Strength Plot

31.Mar 17 13:21

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	30.00 kHz	120.00 kHz	10 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 500 ms
Margin: 25 dB
Subranges: 4

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	34.740000000 MHz	11.89	Quasi Peak	-28.11
1	42.960000000 MHz	10.66	Quasi Peak	-29.34
1	143.880000000 MHz	22.00	Quasi Peak	-21.50
1	199.470000000 MHz	20.09	Quasi Peak	-23.41

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning WX bands, 30 – 200 MHz Vertical Peak Plot**

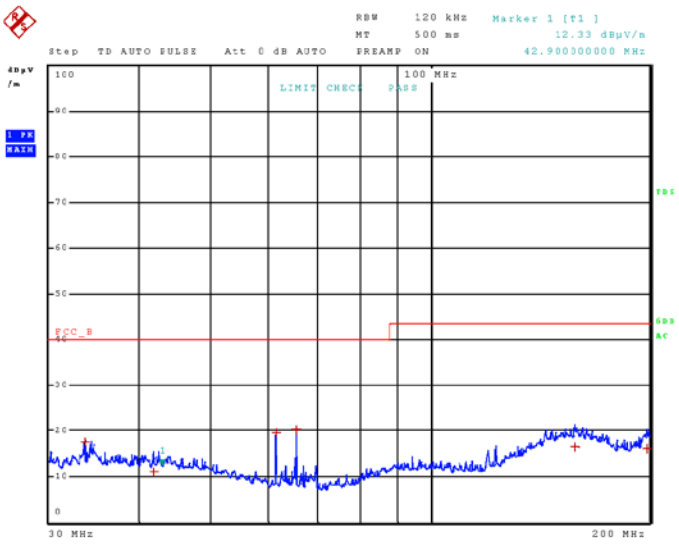
3 Meter Field Strength Plot

31.Mar 17 13:30

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	30.00 kHz	120.00 kHz	10 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 500 ms
Margin: 25 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	33.600000000 MHz	17.48	Quasi Peak	-22.52
1	41.820000000 MHz	11.12	Quasi Peak	-28.88
1	61.380000000 MHz	19.59	Quasi Peak	-20.41
1	65.460000000 MHz	20.35	Quasi Peak	-19.65
1	157.530000000 MHz	16.49	Quasi Peak	-27.01
1	198.360000000 MHz	16.03	Quasi Peak	-27.47

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning WX bands, 30 – 200 MHz Horizontal Peak Plot**

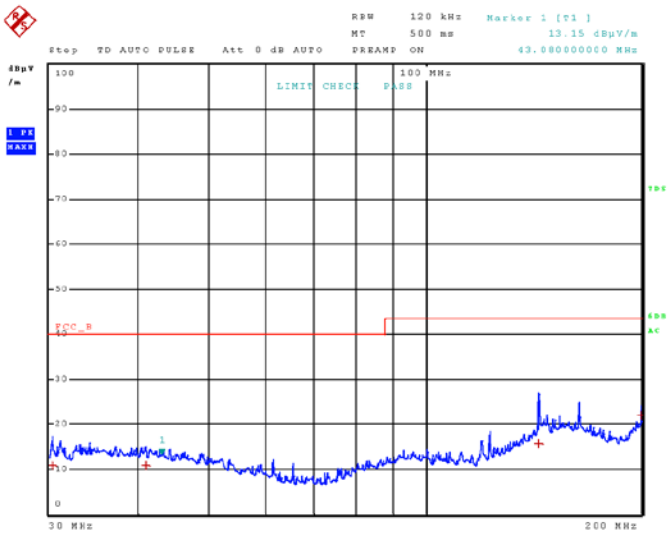
3 Meter Field Strength Plot

31.Mar 17 13:29

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	30.00 kHz	120.00 kHz	10 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 500 ms
Margin: 25 dB
Subranges: 4

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	30.330000000 MHz	10.91	Quasi Peak	-29.09
1	40.830000000 MHz	10.76	Quasi Peak	-29.24
1	143.760000000 MHz	15.74	Quasi Peak	-27.76
1	199.470000000 MHz	21.85	Quasi Peak	-21.65

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning all bands, 30 – 200 MHz Vertical Peak Plot**

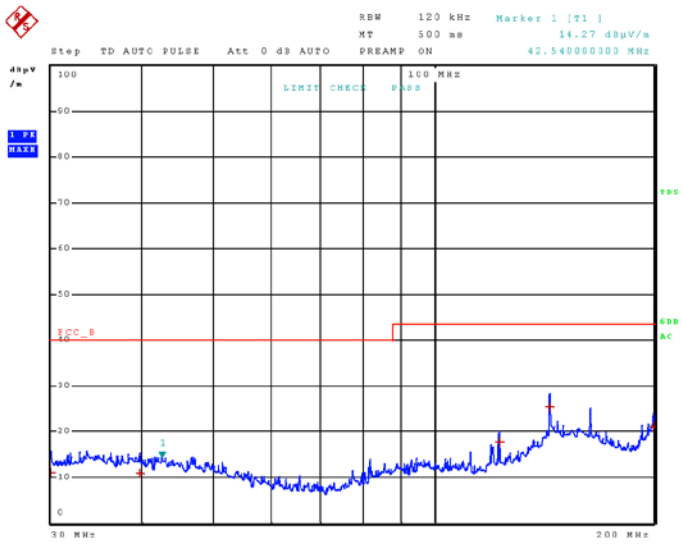
3 Meter Field Strength Plot

31.Mar 17 14:11

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	30.00 kHz	120.00 kHz	10 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 500 ms
Margin: 25 dB
Subranges: 5

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	30.000000000 MHz	10.96	Quasi Peak	-29.04
1	39.660000000 MHz	10.88	Quasi Peak	-29.12
1	122.760000000 MHz	17.74	Quasi Peak	-25.76
1	144.210000000 MHz	25.38	Quasi Peak	-18.12
1	199.500000000 MHz	21.21	Quasi Peak	-22.29

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning all bands, 30 – 200 MHz Horizontal Peak Plot**

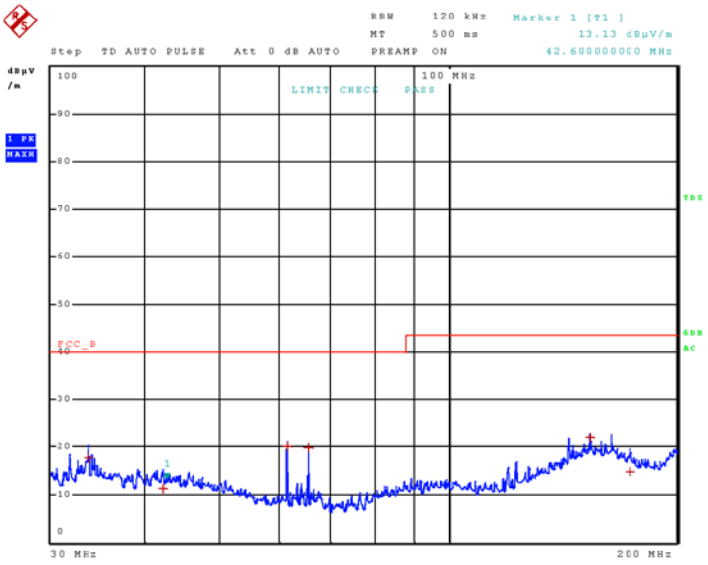
3 Meter Field Strength Plot

31.Mar 17 14:09

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	30.00 kHz	120.00 kHz	10 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 500 ms
Margin: 25 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	33.630000000 MHz	17.82	Quasi Peak	-22.18
1	42.090000000 MHz	11.17	Quasi Peak	-28.83
1	61.380000000 MHz	20.06	Quasi Peak	-19.94
1	65.460000000 MHz	19.78	Quasi Peak	-20.22
1	153.450000000 MHz	21.89	Quasi Peak	-21.61
1	173.280000000 MHz	14.74	Quasi Peak	-28.76

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: Tuned to 27.205MHz MHz, 200 - 1000 MHz Vertical Peak Plot

3 Meter Field Strength Plot

ROHDE&SCHWARZ

03.Apr 17 11:35

Test Spec CISPR 22 Radiated Disturbances

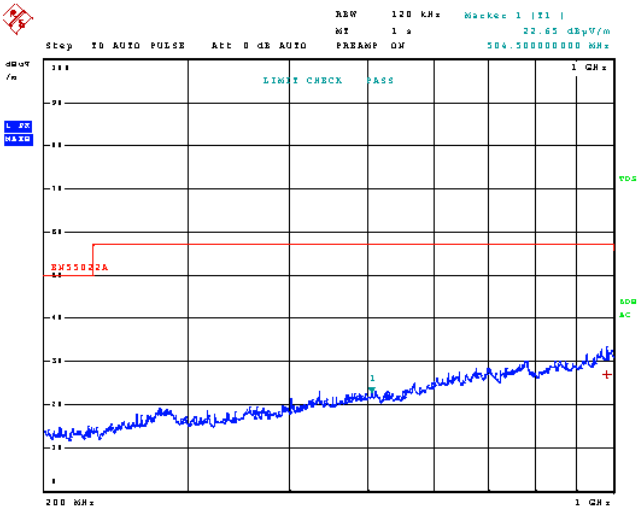
Polarity

Vertical

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 1 s
Margin: 25 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	981.890000000 MHz	26.92	Quasi Peak	-30.08

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Tuned to 27.205MHz MHz, 200 - 1000 MHz Horizontal Peak Plot**

3 Meter Field Strength Plot

ROHDE&SCHWARZ

03.Apr 17 11:34

Test Spec CISPR 22 Radiated Disturbances

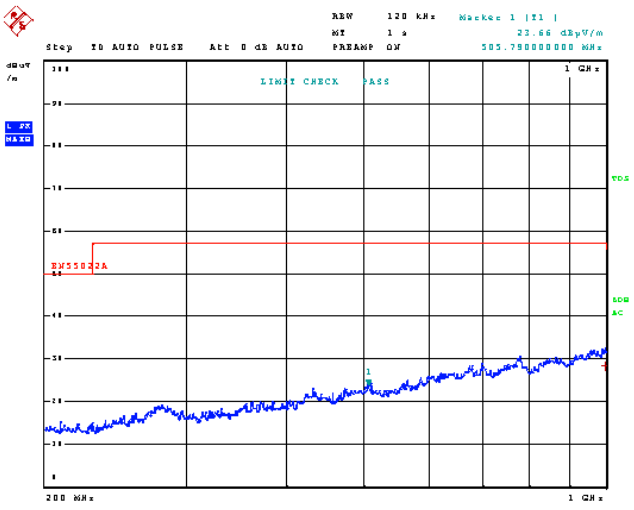
Polarity

Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 1 s
Margin: 25 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	998.330000000 MHz	28.21	Quasi Peak	-28.79

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: Tuned to 162.425 MHz, 200 - 1000 MHz Vertical Peak Plot

3 Meter Field Strength Plot

ROHDE&SCHWARZ

03.Apr 17 09:36

Test Spec CISPR 22 Radiated Disturbances

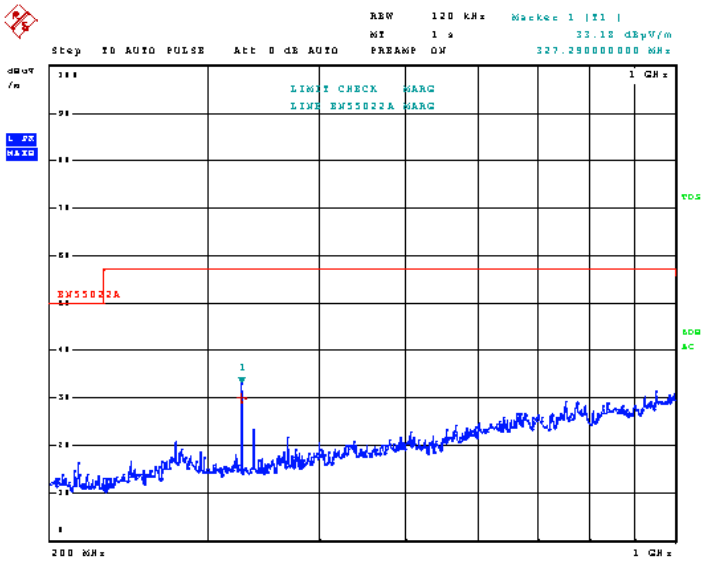
Polarity

Vertical

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 1 s
Margin: 25 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	327.290000000 MHz	29.90	Quasi Peak	-27.10

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Tuned to 162.425 MHz, 200 - 1000 MHz Horizontal Peak Plot**

3 Meter Field Strength Plot

ROHDE&SCHWARZ

03.Apr 17 09:30

Test Spec CISPR 22 Radiated Disturbances

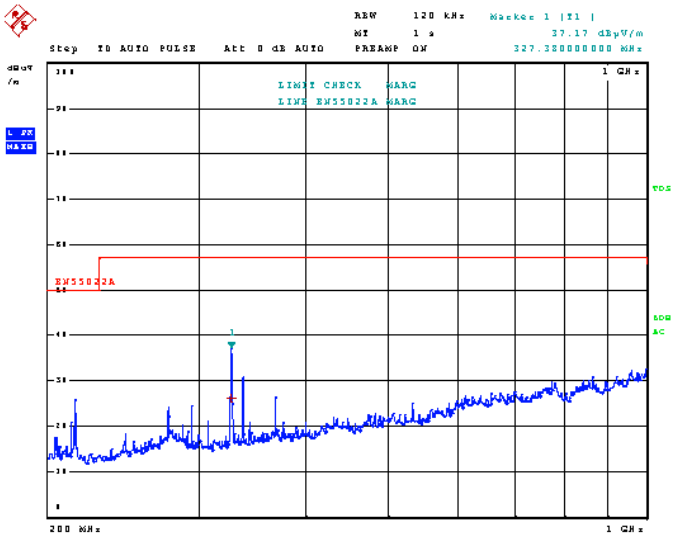
Polarity

Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	327.380000000 MHz	26.15	Quasi Peak	-30.85

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Tuned to 512 MHz, 200 - 1000 MHz Vertical Peak Plot**

3 Meter Field Strength Plot

ROHDE&SCHWARZ

03.Apr 17 10:32

Test Spec CISPR 22 Radiated Disturbances

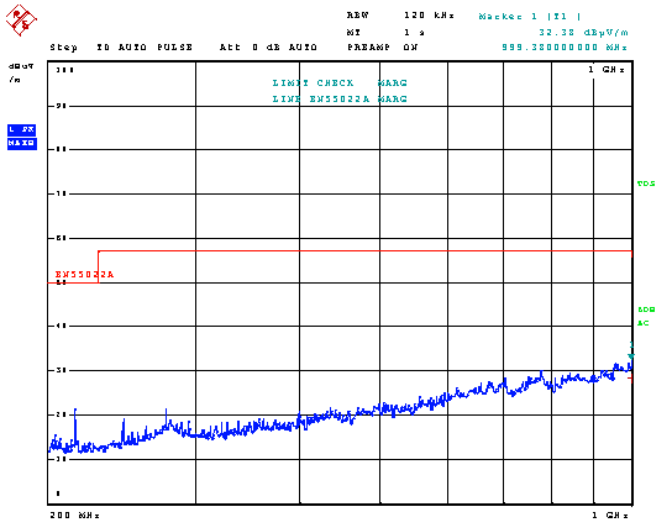
Polarity

Vertical

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 1 s
Margin: 25 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	999.380000000 MHz	28.21	Quasi Peak	-28.79

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: Tuned to 512 MHz, 200 - 1000 MHz Horizontal Peak Plot

3 Meter Field Strength Plot

ROHDE&SCHWARZ

03.Apr 17 10:30

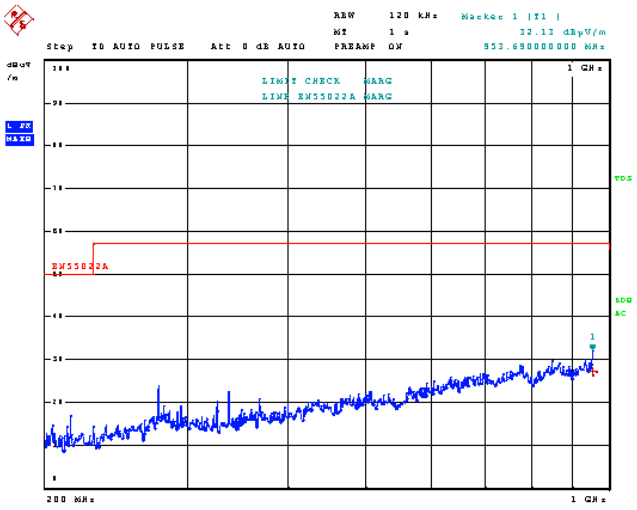
Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 1 s
Margin: 25 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	953.690000000 MHz	27.11	Quasi Peak	-29.89

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning CB bands, 200 - 1000 MHz Vertical Peak Plot**

3 Meter Field Strength Plot

ROHDE&SCHWARZ

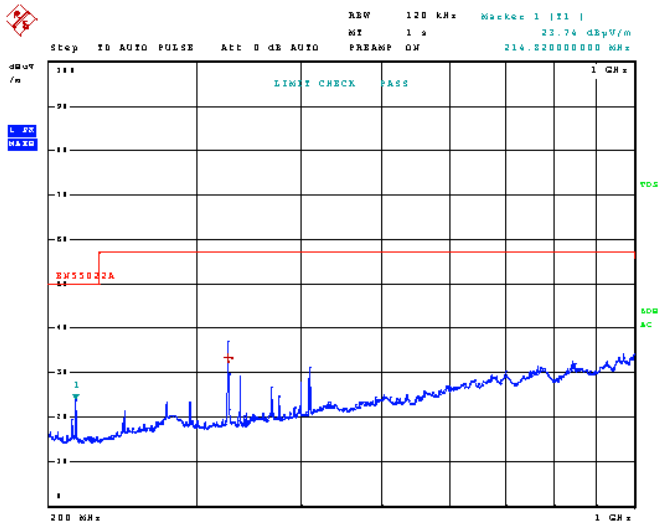
31.Mar 17 15:16

Test Spec CISPR 22 Radiated Disturbances
Polarity
Vertical

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	327.350000000 MHz	33.27	Quasi Peak	-23.73

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning CB bands, 200 - 1000 MHz Horizontal Peak Plot**

3 Meter Field Strength Plot

ROHDE&SCHWARZ

03.Apr 17 08:34

Test Spec CISPR 22 Radiated Disturbances

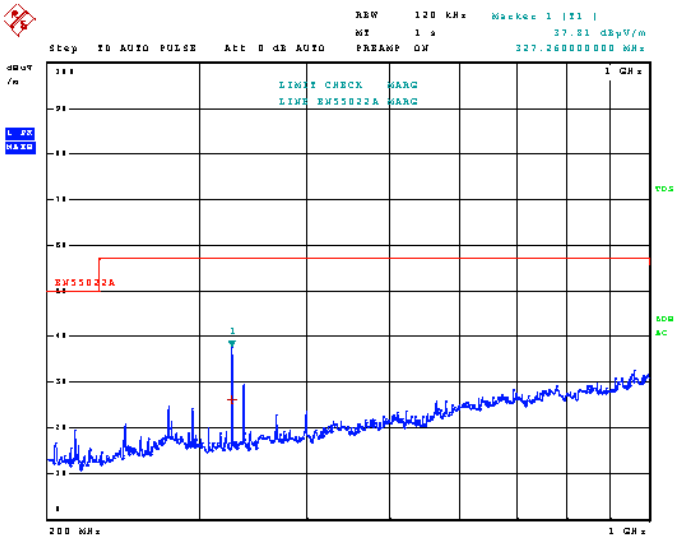
Polarity

Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	327.260000000 MHz	26.06	Quasi Peak	-30.94

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning WX bands, 200 - 1000 MHz Vertical Peak Plot**

3 Meter Field Strength Plot

ROHDE&SCHWARZ

31.Mar 17 15:06

Test Spec CISPR 22 Radiated Disturbances

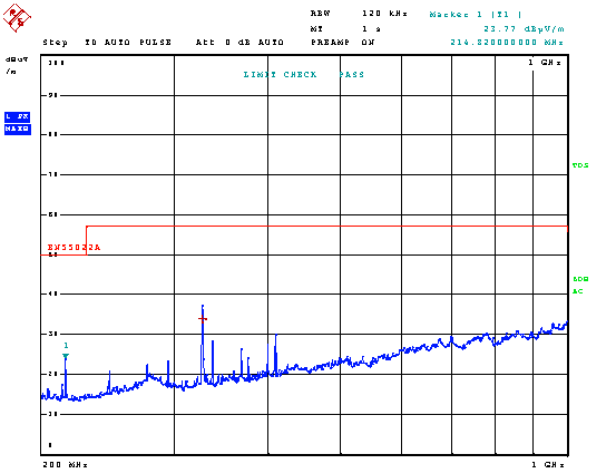
Polarity

Vertical

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	327.380000000 MHz	33.90	Quasi Peak	-23.10

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning WX bands, 200 - 1000 MHz Horizontal Peak Plot**

3 Meter Field Strength Plot

ROHDE&SCHWARZ

31.Mar 17 15:04

Test Spec CISPR 22 Radiated Disturbances

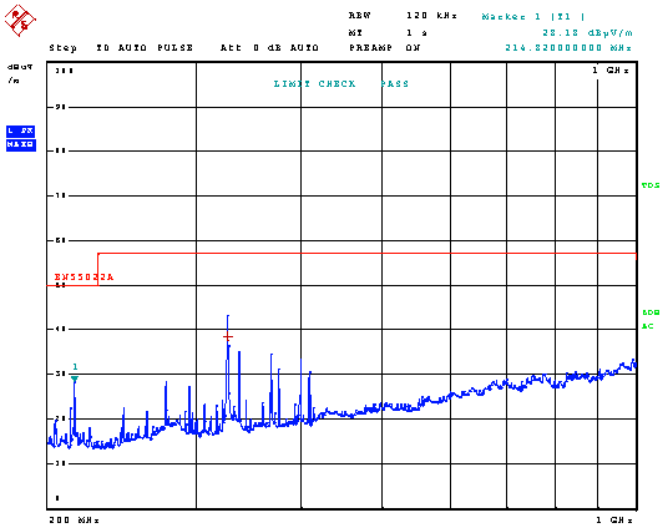
Polarity

Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	327.380000000 MHz	38.56	Quasi Peak	-18.44

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning all bands, 200 - 1000 MHz Vertical Peak Plot**

3 Meter Field Strength Plot

ROHDE&SCHWARZ

31.Mar 17 14:39

Test Spec CISPR 22 Radiated Disturbances

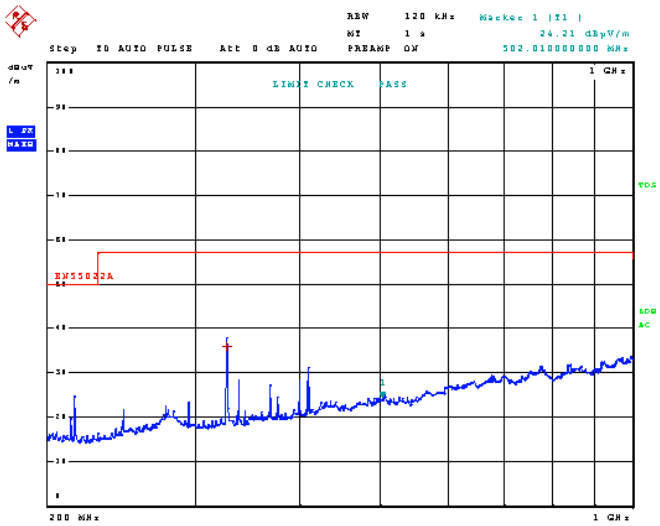
Polarity

Vertical

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	327.380000000 MHz	36.12	Quasi Peak	-20.88

Page 1 of 1

Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: **Scanning all bands, 200 - 1000 MHz Horizontal Peak Plot**

3 Meter Field Strength Plot

ROHDE&SCHWARZ

31.Mar 17 14:53

Test Spec CISPR 22 Radiated Disturbances

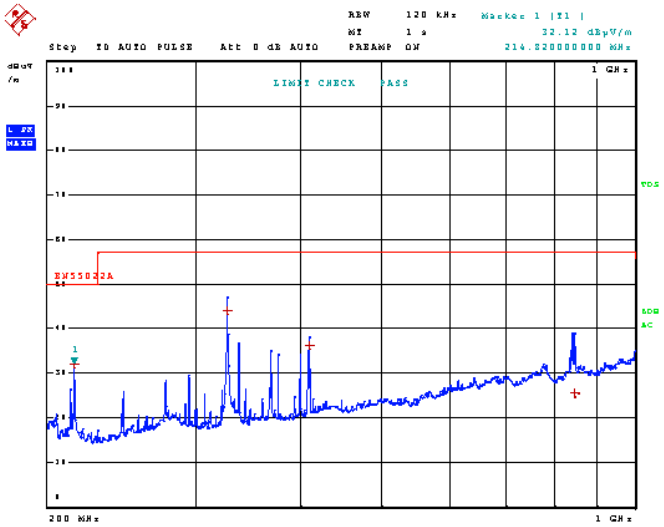
Polarity

Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1



Results Meets Requirements

RADIATED SPURIOUS EMISSIONS

Test Data: Scanning all bands, 200 - 1000 MHz Horizontal Peak Plot Cont.

3 Meter Field Strength Plot

31.Mar 17 14:53

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 4

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	214.820000000 MHz	32.07	Quasi Peak	-17.93
1	327.380000000 MHz	43.95	Quasi Peak	-13.05
1	409.220000000 MHz	36.15	Quasi Peak	-20.85
1	847.760000000 MHz	25.45	Quasi Peak	-31.55

Page 2 of 2

Results Meets Requirements

TEST EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal/Char Date	Due Date
DC Power Supply	HP	6286A	1744A03842	N/A	N/A
Antenna: Biconical 1096 Chamber	Eaton	94455-1	1096	07/14/15	07/14/17
Antenna: Log-Periodic 1122	Electro-Metrics	LPA-25	1122	07/14/15	07/14/17
CHAMBER	Panashield	3M	N/A	04/25/16	12/31/17
Software: Field Strength Program	Timco	N/A	Version 4.10.7.0	N/A	N/A
Antenna: Active	ETS-Lindgren	6502	00062529	11/18/15	11/18/17
EMI Test Receiver R & S ESU 40 Chamber	Rohde & Schwarz	ESU 40	100320	04/01/16	04/01/18
Coaxial Cable - Chamber 3 cable set (Primary)	Micro-Coax	Chamber 3 cable set (Primary)	KMKM-0244-01; KMKM-0670-00; KFKF-0198-01	08/09/16	08/09/18
Bore-sight Antenna Positioning Tower	Sunol Sciences	TLT2	N/A	N/A	N/A

***EMI RECEIVER SOFTWARE VERSION**

The receiver firmware used was version 4.43 Service Pack 3

END OF TEST REPORT